

out, producing intercrossings by sexual reproduction. That the gemmules of the new form are considerably smaller than is usual in *Spongilla* has little or nothing to do with the matter; the gemmules of *S. lacustris* vary very considerably in size in different localities, perhaps according to the size of the piece of water inhabited by the sponges, or that of the parent animal, but I can say nothing positive as to the cause of this phenomenon.

From what is above stated, we find the gemmules of the freshwater sponges adapted in the following manners:—1. Passively locomotive with aerostatic apparatus, the flying form (of the dry season), *nitens* series; 2. Passively locomotive swimming form, with anchoring apparatus, for propulsion at the surface before the wind, *lacustris* series; 3. Swimming form, with check-apparatus for slow locomotion in running water, *fluvialis* series; 4. Secured from desiccation by a double enclosure, adhering firmly to the body of the parent, and only arriving at development when the water, during the wet season, rises again to the level, genus *Parmula*, Cart.

Besides these there also exist freshwater sponges without gemmules:—*Lubomirskia* from Lake Baikal; the forms collected in the Congo by Dr. Pechuël-Löschke, forming a new genus, *Potamolepis*, a description of which, by myself, has lately appeared in the 'Jenaische Zeitschrift'\*, and the subterranean *Spongilla stygia*, Joseph, from the Cave of Gurk, in Carniolia.

In conclusion, I repeat my previous request to all my fellow-labourers to be kind enough to aid me with material, accompanied by the most exact account of the localities (the nature of the water, whether moving or quiet, whether large or small, brook, river, old river-course, pool or lake; the nature of occasional affluences, whether exposed to desiccation, &c. It is necessary to know everything!). A great many gentlemen have most kindly complied with my former prayer, but for the solution of certain questions the material can hardly be large enough!

## XX.—On a new Genus of *Butterfly* from New Zealand.

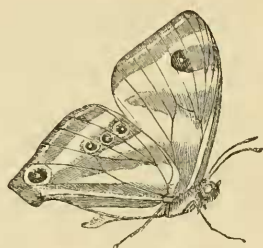
By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

AT a meeting of the Philosophical Institute of Canterbury, New Zealand, held on the 30th November, 1883, Mr. R. W. Fereday read the "Description of a Species of *Butterfly* new

\* See Ann. & Mag. Nat. Hist. ser. 5, vol. xii. p. 391, December 1833.

to New Zealand and probably to Science," to which he gave the name of Genus? *helmsi*; this species he referred to the Nymphalidæ, but did not venture to assign it to any group in that family.

As Mr. John D. Enys, who is now in England, has brought over the type specimen of this butterfly for my examination, with the request that I will determine its position and name the genus, I have great pleasure in doing so. The genus being a new one and greatly resembling the genus *Dodona* of Hewitson both in form and general coloration, I propose to call it



#### DODONIDIA, gen. nov.

This genus, as indicated by Mr. Fereday, belongs to the great family Nymphalidæ (subfamily Satyrinæ), and although it corresponds most nearly in form with *Corades* (a New-World genus), it appears to me to be more closely related to the Australian genera *Argynnina* and *Geitoneura*, from the former of which (apart from its different form) it chiefly differs in the shape of the discoidal cell of the secondaries, which is acutely pointed instead of truncated, owing to the length and obliquity of the discocellular veinlets. The body, inclusive of palpi and antennæ, corresponds closely with that of *Argynnina*; the style of coloration of the wings is most like that of *A. lathoniella*: the primaries are triangular, but with the apex and external angle obtusely rounded off; the costal margin is nearly straight, slightly incurved before the middle, and very slightly convex from apical third; the outer margin is nearly straight, rather oblique, slightly convex at apex, and incurved at external angle to meet the inner margin, which is also nearly straight; costal vein extending to apical third; subcostal five-branched, the first branch only emitted before the end of the cell, the second, third, and fourth at about equal distances beyond the cell, the fourth and fifth forming an

almost equal fork to apex and outer margin; upper radial emitted from anterior angle of the cell, lower radial near to upper, so that the upper discocellular (which is inangled) is of about one third the length of the lower discocellular; the latter is slightly arched and oblique; median nervules about equidistant; submedian vein running rather near to inner margin: secondaries elongate triangular, subcaudate, and evidently internally lobed at anal angle (these wings are, however, much injured); costal margin strongly lobate close to base, so as to commence with almost a rectangle, nearly straight from the angle to the apex; outer margin slightly convex and sinuous and very oblique; abdominal margin sinuous or elongate-sigmoidal to the extremity of submedian vein, where it appears to form an obtuse angle to first median branch (but unfortunately this part of the wing is clipped away); costal vein arched, with well-defined precostal veinlet projecting into the lobate subbasal angle; subcostal branches and radial emitted at equal distances, their points of emission forming an unbroken oblique line with the lower discocellular veinlet, which is about four times the length of the upper; second and third median branches emitted slightly nearer together than the first and second. Type *D. Helmsii*, Fereday.

*Dodonidia Helmsii*.

*Genus?* *helmsii*, Fereday, Trans. N.-Zeal. Inst. 1883.

Paporoa Range, near Greymouth, South Island, about 1200–1500 feet (*R. Helms*). Type in Canterbury Museum.

XXI.—*Note on some Parasites of Fishes from Madras determined by Dr. Örley.* By Prof. F. JEFFREY BELL, M.A.

BRIGADE-SURGEON BIDIE, in charge of the Government Central Museum at Madras, lately forwarded to Dr. Günther some specimens of Entozoa found parasitic in some of the bony fishes of Madras, where their prevalence, or alleged prevalence, had given rise to one of those epidemics of disquiet which are best allayed by scientific knowledge and investigation.

When the specimens in question were handed over to me I suggested, and Dr. Günther was kind enough to accede to the suggestion, that their exact determination should be entrusted